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LUNCHEON TO PROFESSOR E. FUCHS.

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Special Report

ON THE

Thirteenth International Ophthalmological Congress

AMSTERDAM, SCHEVENINGEN.

SEPTEMBER, 1929.

By

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SUMMARY OF GENERAL PROGRAMME

Thursday, September 5.

2.45 p.m. Ceremonial Opening of the Congress by Her Majesty the Queen Mother, in the Concertgebouw.

4.30 p.m. Reception by the Netherlands Ophthalmological Society in the Paviljoen Vondelpark.

Friday, September 6.

8.30 a.m. Demonstration meeting.

2.30 p.m. Plenary meeting. Symposium.
Aetiology and non-operative treatment of glaucoma.

8.30 p.m. Concert given by the Municipality of Amsterdam, in the Concertgebouw.

Saturday, September 7.

8.30 a.m. and 2 p.m. Communications.

5.30 p.m. Tea at the Y Paviljoen given by the Dutch Medical Association and its section in Amsterdam " Geneeskundige Kring."

8.30 p.m. " Antoni van Leeuwenhoek-film " arranged by Mr. J. E. Mol and Dr. W. H. van Seters. Explained by Dr. W. H. van Seters.

Sunday, September 8.—*Excursions.*

I. Visit by motor-cars to the old and modern architectural quarters and some of the museums of Amsterdam.

Luncheon at the " Krasnapolsky."

II*a* and II*b*. Excursion by boat to the island of Marken and to Volendam. Luncheon at Spaanders Hotel, Volendam.

III*a* and III*b*. Trip by boat across the Zuyder Zee and a visit to Enkhuysen and Hoorn by motor-car.

Monday, September 9.

8.30 a.m. Plenary meeting. Symposium.
Trachoma; its geographical spread, and the international and social methods devised to combat it.

2.30 p.m. Communications.

Tuesday, September 10.

8.30 a.m. and 2.30 p.m. Communications.

Wednesday, September 11.

Departure for Scheveningen in four groups.

8.30 p.m. Reception by the Minister of Arts and Sciences on behalf of the Government at the "Ridderzaal," Binnenhof, the Hague.

Thursday, September 12.

8.30 a.m. at the Seinpost Theatre, Scheveningen.
Plenary meeting. Communications.

2.30 p.m. Plenary meeting. Symposium.
Diagnostics of the suprasellar tumours.

7.30 p.m. In the Kurhall. *Banquet.*

Friday, September 13.

8.30 a.m. Plenary meeting. Communications.

11.15 a.m. General meeting.

3.30 p.m. Closing session.

5 p.m. Reception by the Municipality of the Hague at the "Hotel de twee Steden," Buitenhof.

Thirteenth International Congress of Ophthalmology

CEREMONIAL OPENING OF THE CONGRESS BY HER MAJESTY THE QUEEN-MOTHER

THE Thirteenth International Congress of Ophthalmology was opened by Her Majesty the Queen Mother of the Netherlands on September 5, 1929, at 2.45 p.m. in the Concertgebouw, Amsterdam.

PROFESSOR DOCTOR VAN DER HOEVE in his presidential address extended a cordial welcome to all the nationalities which were to take part in the Congress. He said that this Congress has brought together many distinguished ophthalmologists and scientists.

To the representatives of the English language he said that it is a well known fact, that ophthalmology owes much to English-speaking scientists, such as Isaac Newton, Thomas Young, and a host of others. He paid a tribute to the famous physiologist and oculist William Bowman, in whose laboratory and clinic scientists from all over the world met, and where friendships were made that proved to be fraught with the greatest consequences for the future of ophthalmology. For instance it was in Bowman's laboratory that Donders and von Gräfe met.

The QUEEN-MOTHER declared the Congress open in the following words:—

"It is a great pleasure to see the oculists of the world joined together here, and I greet you as the noble representatives of

ophthalmology, a science which deserves one of the highest places. You have prepared yourselves to undertake an arduous task and to do a great work in the interest and for the well-being of humanity."

" Let me assure you that I and the people of the Netherlands will follow your discussions and debates with the greatest sympathy and the most vivid interest. In expressing our most fervent wishes for the success of your efforts and for a favourable result of your conferences, I declare open the Thirteenth International Congress of Ophthalmology."

Delegates from England, Germany, France, Italy, and Spain spoke as representatives of their country and of the respective languages to be used during the Congress.

SIR JOHN PARSONS spoke for Great Britain. He expressed thanks for the hospitality that Holland has extended to the Congress and said that for two reasons Holland was specially suitable as its venue. As the birthplace of Leeuwenhoek, Huygens, Boerhaave, Donders and Snellen it attracted all scientists. And since such Congresses could not fail to foster the amity of nations it was eminently desirable that the first International Ophthalmological Congress since the war should take place in the country which was the birthplace of Grotius and the home of the Palace of Peace.

Representatives of the four remaining continents, America (North and South), Asia, Africa, and Australia, and of the smaller countries, the Dutch East Indies, and the Netherlands also spoke.

After the opening ceremony the Netherlands Ophthalmological Society entertained the members of the Congress to tea in the Paviljoen Vondelpark.

[Only a brief account of some of the more important papers and discussions is given here. The official transactions of the International Congress will contain a more detailed description.]

FRIDAY, SEPTEMBER 6, 1929.

At 8.30 a.m. a demonstration meeting was held in the Aula of the Colonial Institute. MR. TREACHER COLLINS was in the chair as President of the meeting.

Papers were read and many instruments of scientific interest were demonstrated, in particular a precision refracting instrument described and shown by Dr. L. D. Green of San Francisco; a poly-ophthalmoscope used for clinical teaching, and capable of accommodating eight students and the demonstrator, shown by Dr. W. Wegner (Greifswald); with some very interesting slides demonstrated by Miss Dobson (London) on the subject of ophthalmoscopy by red free light. MISS DOBSON gave an interesting address in a clear and audible tone; it was admirably illustrated by slides showing the normal macula, the arcuate fibres, folds in the internal limiting membrane, haemorrhages, exudates of the macula, arterio-sclerosis, and the changes in and around the optic disc in glaucoma. Miss Dobson used the photographical ophthalmoscope of the late Mr. Wertheim Salomonson, a 4 ampère carbon arc-lamp, different red-filters, a blue-green for the macula and yellow for the fibres, and specially prepared Kodak films.

M. NIDA (Paris) attempted to show some slides demonstrating colour photography of the fundus oculi. The slides were spoilt by the heat from the projection apparatus, and so we were robbed of what might have been an interesting demonstration.

PROFESSOR A. ELSCHNIG, of Prague, showed a film illustrating the technique he adopts for intra-capsular extraction of senile cataract. The dexterity of the operator appeared to be marvellous. He injects the upper and lower lids and the tissues in the vicinity of the orbital branches of the facial nerve with 20 c.c. of novocaine 2 per cent. and adrenalin 1/1,000, also the tissues of the orbit, through a puncture made in the conjunctiva between the inferior and external recti muscles. A piece of sterile lint covers the entire face with the exception of an aperture cut out for the eye and lids. Hand retractors are used. After the corneal section is made the conjunctiva has a suture passed through it, and this is left untied until the end of the operation. Capsule forceps are passed into the anterior chamber and the anterior lens capsule is seized low down at 6 o'clock, and the lens extracted. A button-hole peripheral iridectomy is performed and the iris replaced. The conjunctival flap is stroked back into position, the suture tied, and the toilet of the wound completed by painting the edges of the conjunctival incision with weak antiseptic. Some sterile vaseline is applied to the edges of the lids and the eye protected from injury by a perforated metal disc placed over a dressing. This is held in position by strips of adhesive strapping.

C. WESSELY (München) showed a colour cinematograph of operations for cataract extraction, excision, tenotomy, and division of anterior synechiae. The preliminary treatment, operative technique, and the application of the dressing were of interest.

PLENARY MEETING. SYMPOSIUM.

At 2.30 *p.m.* papers were read on " The aetiology and non-operative treatment of glaucoma " by Messrs. Duke-Elder (London), Hagen (Oslo), Magitot (Paris), and Wessely (München).

MR. DUKE-ELDER dealt very ably with the problem of glaucoma. He considers that in the present state of our ignorance of the more fundamental processes underlying this disease, it is profitable to regard the metabolism of the eye in so far as it concerns glaucoma, under the heading of two equilibria :

(i) The capillary blood and the intraocular fluids.
(ii) Intraocular fluids and the vitreous body.

He showed a table comparing the chemical constitution of the aqueous, the blood serum, and the vitreous. In his opinion the aqueous is a dialysate of the capillary blood, and it has osmotic, hydrostatic, and electrostatic equilibrium with the capillary plasma.

A continuous metabolic interchange is taking place on either side of the capillary walls. This reciprocal interchange is accompanied by a diffusion out or in of diffusible substances according to their several differences in concentration, and according to their electric charge, while their ultimate distribution is subject to a re-adjustment depending on colloid impermeabilities.

Intraocular pressure is maintained by the establishment of equilibrium between the hydrostatic pressure in the capillaries less the difference in osmotic pressure between the aqueous humour and the capillary plasma.

Pathological alterations in the pressure occur by :

(i) Varying the capillary pressure.
(ii) Varying the difference in osmotic pressure between the two fluids.

Hertel has shown that a diminution of the osmotic pressure of the blood by decreasing the salt content, brings about a rise of pressure in the eye, and the converse also occurs.

Mr. Duke-Elder described the recent investigations on the vitreous body with the ultra-microscope. The vitreous body is a gel and its constituents are those of the aqueous plus a muco-protein responsible for transparency and a residual protein for gelability. An increase of alkalinity causes swelling of the vitreous, and an increase in acidity shrinkage.

The two main factors dominating the aetiology of glaucoma are firstly the physico-chemical changes largely affecting the vitreous and secondly changes in the capillary circulation. Little is known about the former, but the latter is influenced by local and general disease of the vascular system, metabolic dyscrasias, toxic states; renal, dietetic, or infective; a derangement of the sympathetic nervous system, the endocrine glands, and by psychological causes, or by the elaboration of some specific toxin, *e.g.*, histamine.

If these considerations be accepted it follows that the rational treatment of glaucoma is essentially medical. In the majority of cases surgical treatment is palliative, but at the same time in view of the ignorance of the ultimate aetiology, and of the physico-chemical basis underlying it, it must be admitted that at the present time medical treatment, although it can do much, cannot by any means replace surgery.

HAGEN (Oslo) showed some interesting charts of the rise and fall of the intraocular pressure during the day and night. With glaucoma simplex the curve generally shows a rise each night, with secondary glaucoma a fall at night time. Their pathogeny is said to be different, the one has an obstructed outflow, and the other a raised secretion.

MAGITOT (Paris) is of opinion that glaucoma is an oedema. He discussed the various theories for this view under the headings of disturbances in the circulation, retention, physico-chemical factors, changes in the osmotic equilibrium, or in the pH constant, hormonal, nervous, toxic or infectious factors, and lastly the influence of cellular autolysis. He laid stress on the importance of general medical treatment together with local therapeutic measures. Eserine and pilocarpine decrease the permeability of the capillaries, and the action of these miotics may temporarily be eked out or replaced by adrenalin. Dr. Magitot attached great weight to an accurate examination of the general condition for cardio-vascular derangements, hereditary and acquired lues. He emphasized the importance of a diet poor in salt and water.

WESSELY (München) stated that the influences to which intraocular pressure is subject from the side of the general circulation, or the nervous system, or the osmotic-equivalence-process, and the correlations of the internal secretions, are so manifold, that any theory which attempts to bring out one of these factors as the decisive one, already bears the stamp of imperfection beforehand. In the therapeutics of glaucoma it is dangerous to subordinate the approved local treatment to general measures, and the right moment for operative intervention must not be allowed to pass by unutilized. This subject was discussed at great length by Messrs. Lacat, Mawas, Herbert, Passow, Fracassi, Hamburger, Friedenwald, Bonnefon, and several others.

The work of H. Friedenwald (Baltimore) was of particular interest. He showed a series of microphotographs of the filtration angle and the ciliary body. Some of the sections had been especially stained to demonstrate the fibrinous exudate in the peri-vascular lymph spaces and beneath the epithelium of the ciliary processes. The concentric rings of fibrin around the capillaries indicate the escape of plasma into the tissues where clotting has taken place. Dr. Friedenwald also showed photographs of his experimental work on dogs and some tracings of the intraocular pressure when histamine was injected into the anterior chamber and the vitreous respectively.

Histamine injected into the anterior chamber produces hypotension, oedema of the cornea and conjunctiva, with mydriasis. Histamine injected into the vitreous produces mydriasis with a rise of intraocular tension, and is followed by a rapid fall in tension to sub-normal levels. This fall coincides with the advent of histamine into the anterior chamber; it may be hastened by mydriasis, and delayed by miosis, or by the injection of serum into the anterior chamber.

At 8.30 *p.m.* in the Concertgebouw the members of the Congress listened to a very excellent orchestral concert given by the Municipality of Amsterdam. Beethoven's Symphonie No. VII was played magnificently.

Saturday, September 7, 1929.

During the morning and afternoon communications were read in the Aula of the Colonial Institute, the Anatomy, and the Hygiene laboratories simultaneously. While rushing from one lecture hall to another I chanced to meet an American who looked disconsolate. He told me that " he guessed he felt like the donkey which stood between two haystacks and not knowing which to feed from starved between the two." This analogy explained the situation admirably for there was so much of interest taking place at one time.

In the Aula of the Colonial Institute Mr. Lindsay Rea (London) described and demonstrated with diagrams the retention suture in extra-ocular operations. He denounced the practice of tenotomy as being bad surgery. The subsequent fate of the severed muscle is unknown and in many cases extremely unpleasant consequences have resulted from this practice. The alternative is either to do a recession or, as Mr. Lindsay Rea demonstrated, to pass two sutures through the divided muscle belly and then through the tendinous insertion. These sutures are brought out through the conjunctiva and the axis of the globe corrected by tightening or relaxing these sutures. He also advises this procedure where

recession is combined with advancement. Mr. Lindsay Rea passes the sutures through the muscle that is to be recessed and then leaves them until after the advancement is completed, he then ties them and re-adjusts the axis of the eye accordingly.

Mr. E. N. Hughes gave an interesting paper on the structure of the vitreous body, its composition and physical properties.

Drs. J. Burdon-Cooper and S. Judd Lewis (Bath) read a communication on " The mineral constituents of cataractous and normal lenses and the like." It was shown by spectrographic analysis that the ratio of potassium to calcium in the lens appears to fall with development of cataract. The relative proportions of the principal elements have been studied also with regard to sodium, magnesium, zinc, lead, silicon, boron, etc.

Dr. Dorothy Adams (London) followed and gave the results of her research work in this matter. She confirmed the fact that the calcium content of the lens is increased in senile cataract, and stated that she has found that this varies in individual cataractous lenses. Dr. Adams suggested that the deposition of calcium in the lenses is an erratic process, which is probably facilitated by a slight but definite rise in the blood calcium. She gave figures to show the relationship between the calcium content of the lens and the blood calcium. Dr. Adams stated that from experiments on rabbits it is clear that calcium is not the primary factor that causes cataract.

Miss Ida Mann (London) read a paper on " The vessels of the iris in the sauropsida." Two main types of iris vascularisation can be recognized among the sauropsida, both of them differing markedly from the mammalian type and neither possessing a direct arterio-venous anastomosis. The first type (found in amphibia also) consists of circumferential arteries with capillaries and veins, either deep to or approximately on the same level. The second type shows circumferential arteries, as does the first, but in addition has a new super-imposed drainage system of superficial radial veins leading from a circum-pupillary plexus. This type occurs in some lizards and some birds.

Amongst many interesting papers there were several worthy of particular mention. H. Morton (Minneapolis) read a paper entitled " Thesis and argument for an hypothesis regarding amblyopia ex anopsia (so-called)"; L. C. Peter (Philadelphia) one on "Amblyopia in concomitant squint "; A. Barkan (San Francisco) one on " The occlusion test for latent hyperphoria and its clinical results "; Professor Sattler (Königsberg) one on " Prismatic spectacles for the early treatment of strabismus concomitans "; C. Berens (New York) one on "Studies in ocular fatigue" and gave a demonstration of the ergograph which he uses; and D. W. Wells (Boston) spoke on " Some forms of oculo-muscular anomalies."

At 8.30 *p.m.* Dr. W. H. VAN SETERS showed a cinematograph film entitled " Antoni van Leeuwenhoek-film." The film illustrated the earliest form of microscope as used by this famous Dutch scientist nearly 300 years ago; also the books in which are printed his observations on plant and animal life, with drawings of the specimens examined. The film passed on to the modern application of the cinematograph and microscope to biology. The life history and reproduction of uni-cellular organisms found in fresh water were demonstrated with remarkable ingenuity. The film was most interesting and attractive.

SUNDAY, SEPTEMBER 8, 1929.

Our hosts organized excursions in five groups. One group was taken by motor-car and shown the old and modern architectural quarters of Amsterdam, and the members were entertained to lunch at the " *Krasnapolsky.*" Two other groups went by boat to the Island of Marken and to Volendam where they lunched at the Spaanders Hotel. The two remaining groups were taken by motor-cars to Enkhuyzen and Hoorn, and subsequently, by boat across the Zuyder Zee, to Amsterdam.

The day was fine and the scenery and architecture of the Dutch towns very beautiful. Our hosts were most lavish in their hospitality.

These excursions were of immense value in promoting a sense of " bonhomie " amongst divers nationalities and initiating informal discussions both in ophthalmology and other topics.

MONDAY, SEPTEMBER 9, 1929.

In the Aula of the Colonial Institute papers were read on the " Geographical distribution and the International social campaign against trachoma." Messrs. Grönholm (Helsingfors), von Grosz (Budapest), Maggiore (Sassari), Mijashita (Tokio), Sohby Bey (Cairo), Soria (Barcelona), and Wibaut (Amsterdam) described the distribution of trachoma in their respective countries, with the methods that are adopted to arrest its progress and to bring about the prevention of this disease.

There followed a discussion in which many took part.

Maps were shown of the local incidence of trachoma in all countries throughout the world. Trachoma is a very widespread disease and among certain peoples the incidence is very high. In Tripoli 25 to 80 per cent. of the population are affected; in Sardinia 56 per cent.

In general the methods of preventing and combating this disease are as follows. It is essential that all cases of trachoma should

be notified to the public health authorities. It is necessary to examine all school children, relatives of school children, factory workers, returned emigrants, inhabitants of tenement houses, and those in places where military conscription is in force, and to re-examine these persons from time to time.

Those who undertake the treatment should receive special instruction in this disease and should be encouraged to carry out research.

Trachoma patients should be treated in separate rooms at eye-clinics or hospitals. They must receive instruction about their complaint and how to prevent its spread. In asylums and institutions a separate department must be set aside for patients afflicted with this disease. Special schools should be provided for the children. Patients suffering from trachoma must be kept under close observation for long periods of time and their subsequent progress noted.

Special courses of instruction in the diagnosis and therapy of trachoma should be given at universities and medical schools; it is also advised that there should be co-ordination through an international association.

The Royal Hungarian Minister of Public Welfare and Labour has instituted an international prize of two thousand Swiss francs, to be awarded for the best independent treatise on the aetiology of trachoma, the contents of which treatise must manifest valuable progress in this sphere.

At 2.30 *p.m.* in the Aula of the Colonial Institute, SIR JOHN PARSONS read a paper on " Dyscritic vision, the rôle of the rods." The problems dealt with in this paper were of a high academical nature and most interesting. The author discussed the function of the rods in daylight, and brought forward suggestions and theories as to " short circuiting " of the impulses received by the rods, and the support given to a rod response by a cone response. The periphery of the retina may behave like the macula if the intensity of the light is sufficiently great, *i.e.*, under the influence of a high stimulus the rods at the periphery may behave as the cones at the centre. Graphic representations and curves demonstrating the results of the critical frequency of flicker, the effect of dark adaptation, and the latency of after images were shown on the screen. Sir John suggested that probably all modalities of sensations are, like the tactile sensations, evolved phylogenetically in a more primitive, protopathic or dyscritic form and in a more highly developed and more finely discriminate or epicritic form, There is reason to think that the dyscritic form of vision is associated with the activities of the rods, whereas the cones are the end organs of epicritic vision. Evidence in favour of the dyscritic function of the rods is adduced from the perception of form and

movement, with the persistence of vision, etc., in the periphery of the field.

Lt.-Col. R. E. Wright (Professor of Ophthalmology, Madras) read a paper on " An epidemic of superficial punctate keratitis." This epidemic occurred in Madras in May, 1928, and continued during the following year. Colonel Wright attributed the cause to a filter-passing virus. He related the observations which he and his co-workers had made on the clinical appearances, epidemiology, histo-pathology, and slit-lamp observations. This investigation was carried out on more than 900 cases.

At 9 p.m. in the Royal Palace the Prince Consort of the Netherlands received members of the Congress at a soirée. Many distinguished ophthalmologists were presented to the prince. The hospitality and courtesy extended to us was much appreciated.

Tuesday, September 10, 1929.

In the Aula of the Colonial Institute Mr. F. Ridley (London) read a paper on " Lysozyme." The author described the discovery, nature, and properties of lysozyme, as well as the method of estimation of the lysozyme content of the tears.

In the Anatomical Laboratory Major J. N. Duggan (Bombay) described " Two cases of quinine amblyopia with unusual ophthalmoscopic picture." In both cases there was severe oedema of the retina with normal appearance of the optic disc and blood vessels. The first patient, a girl of 9 years, had taken no more than 1 gramme of sulphate of quinine in 32 hours, and suddenly became blind. During her stay in hospital she was given strong coffee four times a day. Four days after admission yellowish white dots were observed at the maculae. In 12 days there was perception of light, in 15 days, hand movements, and on the 24th day after admission the vision became 6/24 and one month later 6/6. Even when the vision was 6/6 the patient required guidance when walking about, particularly at night time.

The second case was a young man aged 20 years, who, after taking 180 mgms. of quinine three times a day for three weeks suddenly became blind. In this case vision returned in about two weeks, but the visual field was contracted and nyctalopia remained.

A. E. MacDonald (Toronto) read a paper on the " Pathological anatomy of the retina and optic nerve in wood alcohol poisoning." During the summer of 1926 there occurred in the province of Ontario and the State of New York an epidemic of sudden deaths, in which blindness preceded death. An investigation revealed the fact that these persons had been drinking 1—2 pints of methyl alcohol 35 to 40 per cent. Three of the cases seen by Dr. MacDonald came to autopsy, and one was examined as early

as six hours after death. The subjects were placed under refrigeration soon after death so that post-mortem changes in the retina had no chance to progress.

The author showed micro-photographs of the histological changes in the retina and optic nerve. Globules occurred under the internal limiting membrane, the ganglion cells appeared to be cloudy and degenerate. There were cystic spaces around the ganglion cells. Dr. MacDonald suggested that if ever another opportunity occurs for examining such material he will stain the retina for fat in order to determine the nature of the contents of these cystic spaces. In the patients who survived, the optic disc became blurred on the third day and subsequently white. Perception of light was lost. The author attributed this to an ascending degeneration of the nerve fibres.

This paper was keenly discussed.

J. A. VAN HEUVEN (Utrecht) gave an account of the ocular affections in glass blowers. He has examined 948 eyes of glass workers. 347 showed some form of congenital anomaly; 249, senile cataract; 3, glass-workers' cataract; 3, rupture of the Zonula layer: 53, a pigment deposit on the anterior lens capsule; and 89, an optic neuritis. 27 of those suffering from optic neuritis had defective colour sense for the centre of the retina, while in every case there was an enlargement of the blind spot for white objects. Dr. van Heuven emphasised the point that not only should the lens be examined in glass blowers but that lesions should be searched for in other parts of the eye.

Professor Elschnig discussed this subject.

H. GASTEIGER (Innsbruck) described a method for diagnosing double perforation of the eyeball. In two cases he has successfully injected air into Tenon's capsule and immediately taken X-ray photographs; one in a vertical plane from beneath the chin, and another on the lateral side of the globe. The air shows the outline of the globe and if a foreign body is present demonstrates the relationship of the globe to this body. Great speed is necessary for the success of this operation for the air escapes quickly from Tenon's capsule.

DR. HENRI LAGRANGE (Paris) read a paper on "Anaphylactic conjunctivitis." He said that the conjunctiva of some people is sensitive to animal and vegetable proteins, and he believes that the typical syndrome of "spring catarrh" can be explained on these grounds. Spring catarrh is often accompanied by a neuro-arthritic diathesis and endocrine disorders, while in patients suffering from this disease there is sometimes a family history of asthma and hay fever.

DR. A. TERSON (Paris) read a paper in which he described the association of follicular conjunctivitis with hyperplasia of adenoid

tissue in other parts of the body, such as the tonsils, adenoids, and appendix. He drew attention to the family history of tuberculosis in the case of children suffering from follicular conjunctivitis.

Dr. D. V. Giri (Eastbourne) gave an account of a female patient, aged 52 years, who for 15 years had suffered from a tumour situated in the right orbit, which had given rise to discomfort. The neoplasm was removed through the conjunctiva, but subsequently the patient had diplopia. After treatment by occlusion of the right eye and exercises she became free from symptoms and remained so until her death 15 months later.

Dr. Rosa Ford (London) read a paper on " Ocular complications of concealed nasal sepsis." Three cases were reported in which radiography and irrigation of the suspected sinus were proved to be of uncertain value, whilst a culture of sinus washings was positive in the two in which this test was used.

Dr. A. G. A. Mackay (Edinburgh) read a paper dealing with a survey of the methods employed in Scotland for the control of ocular diseases of venereal origin.

He gave statistics showing the incidence of ophthalmia neonatorum since 1918. The importance of hospital treatment is shown by the fact that within the last five years there has been no case of blinding by ophthalmia neonatorum within the Edinburgh area.

Dr. Mackay spoke also of the work performed by the venereal disease departments with special reference to early treatment of cases of interstitial keratitis and other ocular manifestations of specific infection.

Photograph of the Congress.

At noon on September 10, on the steps of the Colonial Institute, a photograph was taken of the Congress.

Luncheon to Professor Fuchs.

The American contingent gave a luncheon in honour of Professor Fuchs; many famous ophthalmologists were present. It was a pleasant and fitting tribute to this great scientist, teacher and surgeon, whose work and personality are appreciated throughout the world of ophthalmology. By those who have been associated with him and who have had the privilege of being his pupils he will never be forgotten. The warmth of his friendship, his vitality, and enthusiasm for his work will always remain an inspiration to them.

A photograph of the group attending this luncheon is given, as a frontispiece, by permission of the photographers.

Reception by the Queen.

In the evening the Queen of the Netherlands received a select and distinguished body of ophthalmic surgeons at her country residence.

Wednesday, September 11, 1929.

The departure for Scheveningen was made in four groups:

A. A very pleasant boat trip through the Dutch canals to Haarlem, where a visit was paid to the Franz Hals Museum, Teyler's Museum, and the church of St. Bavo. In the church an organ recital was given. Franz Hals's tomb and monument are in the chancel of this church, the carvings and stonework of which are specially noteworthy.

B. A trip by boat was made through the Dutch lake district to Leyden where the new hospital, the Museum de Lakenhal (Drapers Hall), and other places of interest in this old University town were visited.

C. A journey to Delft, one of the oldest and most picturesque Dutch towns. Hugo Grotius and Anthony van Leeuwenhoek lived at Delft.

D. A visit to Rotterdam and a tour through the harbours of this city.

In the evening the Minister of Instruction in the Arts and Sciences held a soirée on behalf of the Government and the members of the Congress were received at the " Ridderzaal " Binnenhof, the Hague.

Thursday, September 12, 1929, at the Seinpost Theatre, Scheveningen.

Several very interesting papers were read and keenly discussed.

Dr. A. Jess (Giessen) described a case of angio-gliomatosis of the retina and glioma of the spinal cord (von Hippel's disease). Macroscopic and microscopic specimens were shown by the projection apparatus. The patient was under observation for 5½ years, eventually dying in consequence of an extensive glioma of the spinal cord. The right eye became totally blind owing to complicated cataract and destruction of the retina, whereas the left eye after X-ray treatment, retained 6/18 vision until death.

Mr. L. Paton and Mr. Williamson-Noble (London) described a case of capillary angiomatosis. Mr. Paton briefly outlined the history and literature of this disease, which was first described by Professor Fuchs in 1882 and later by Mr. Treacher Collins in 1894. The latter called it " capillary naevus of the retina." In 1911 von Hippel gave a very full histological description of this patho-

logical entity, and in Germany it is now called von Hippel's disease. In 1926 Lindau in *Acta Ophthalmologica* gave a very full description of this disease and called it " capillary angiomatosis." It is familial, occurs in adults, has a chronic course, and is associated with a congenital defect of the blood vessels.

The patient under observation was a female aged 16 years, who was first seen by the authors in 1927. Since 1926 the vision of the right eye had been failing; and that of the left had been normal until October, 1927, when it suddenly became clouded. In November, 1927, the patient saw moving lights in the field of vision and flashes of bright light. There were also small fixed patches of light of a crescentic shape. Occasionally severe headaches occurred in the right fronto-temporal region. There was nausea at the idea of food but otherwise the general health was good.

Several fundus paintings of this patient's eye were shown. These paintings had been taken at intervals in the course of the disease.

In *December*, 1927, a decompression operation was performed over the right occipital region. This did not reveal the definite existence of a tumour but there was a great excess of sub-arachnoid fluid. Subsequently the retinal haemorrhages increased in the right eye and a detachment of the retina gave rise to secondary glaucoma necessitating excision of the eye in August, 1928.

Micro-photographs showing the histological appearances of this eye were demonstrated by Mr. Williamson-Noble. There were thin-walled capillaries and spaces lined by endothelial cells lying amongst glial tissue. The authors believe that this supports the suggestion that the primary lesion is of the nature of a capillary angioma and that the gliosis is secondary.

DR. LINDAU was introduced by Professor van der Hoeve and gave an account of the work he did in 1926 on capillary gliomatosis. He paid a tribute to the work of Mr. Treacher Collins who described this disease in 1894, as well as to von Hippel.

PROFESSOR VAN DER HOEVE said that this disease belongs to a group of congenital-hereditary-familial diseases in which are found tumours and cysts of the central and peripheral nervous systems, the fundus oculi, and of other parts of the body.

It is interesting to note that in the brain these tumours are derived from neuroglial tissue, whereas in Lindau's disease the angiomatous element is a prominent feature. He spoke of Dr. Nieuwerhuyze's work on neurofibromatosis, and of the histological specimens which the latter showed in the exhibition room at Amsterdam. Professor van der Hoeve recollected that he had given to this disease the name of "phakomathosen" from "phakos" the Greek word for naevus, and suggested a terminology as follows; angiophakomatosis universalis (Lindau—von Hippel—Treacher

Collins); neurofibrophakomatosis (Recklinghausen); neurocythophakomatosis (Bonneville), etc.

This name has the advantage that it shows the connection between these diseases and gives room for their distinction from one another.

MR. A. W. ORMOND (London) read a paper on " The aetiology of arachno-dactyly." He gave details of three cases. About 30 cases have been recorded in medical literature, and 50 per cent. of these showed definite ocular lesions.

Photographs were shown. The limbs are thin and of great length, the bones being under developed and the muscles atrophic. The feet and hands are particularly long and they are webbed in some instances. The patellae are situated at a higher level than normal, the scapulae are winged, and there is an entire absence of subcutaneous fat. The ocular changes show ectopia lentis and miosis.

The author discussed the aetiology of the ocular and skeletal defects, which he believes are due to influences operating before birth, probably of an endocrine nature. He compared this disease with the Lorain type of infantilism, and drew attention to the frequency of congenital ocular defects in cretinism and mongolism.

DETACHMENT OF THE RETINA

PROFESSOR DR. KAPUSZINSKI (Posnan) read a paper on the difference between the symptoms in senile and myopic detachment of the retina. He demonstrated a case where cystic degeneration of the retina was the primary cause, and stated that the cysts do not manifest themselves owing to traction of the adhesions with the corpus vitreum.

DR. H. ARRUGA (Barcelona) dealt with the treatment of detachment of the retina. He confirmed the findings of Professor Gonin that in most cases of retinal detachment there are tears. If these tears close themselves spontaneously or through treatment, reposition of the retina takes place, but otherwise this does not happen.

The tracing and localization of these tears constitutes the greatest technical difficulty. When the detachment is recent 50 per cent. are cured by thermo-cautery, provided that there has been no previous treatment, and that the tear is small and situated in the vicinity of the ocular equator.

Where the detachment has occurred 1—2 months before, and where there has been previous treatment, the tears being large and situated behind the equator, or if extensive morbid changes are present in the retina and choroid, then only 10 per cent. are cured.

In the opinion of the author direct obliteration of the tear is the

quickest and most effective method up to date for the treatment of spontaneous detachment of the retina.

Dr. J. Gonin (Lausanne) spoke at some length on his methods of local treatment of detachment of the retina. He laid stress on the importance of detecting a hole in the retina and of localizing this tear very accurately. It is the discovery of this tear which makes a cure possible, because the hole may then be closed by a thermo-puncture through the sclerotic and vitreous thereby prevented from passing through the hole. Later the choroid and retina become adherent at the point of the puncture. An operation of this kind is more successful in recent cases than in older ones, and in the opinion of Dr. Gonin it ought not to be delayed by attempts at other forms of treatment which are generally useless.

Dr. Gonin showed many fundus paintings of patients suffering from detachment of the retina both before and after thermo-cautery puncture. His results are certainly remarkable.

Dr. P. Bufill (Barcelona) also discussed the surgical treatment of detachment of the retina.

This subject was one of the most keenly discussed ophthalmological problems at the Congress.

At 2.30 *p.m.* papers were read on " The diagnostics of the suprasellar tumours " and a discussion followed.

Mr. Harvey Cushing (Boston), whose fame as a surgeon of the central nervous system is world-wide, opened the proceedings. The title of his paper was the " Chiasmal syndrome." The courteous manner in which he delivered his address as well as its substance was delightful. He described the chiasma as the cross roads where the ophthalmologist, the neurologist, the rhinologist, the radiologist, and neuro-surgeon met, but that in his opinion the ophthalmic surgeon possessed the right of way.

He spoke of the difficulty in the diagnosis of lesions of the chiasma, and described the chiasmal syndrome as being a primary optic atrophy, together with a bitemporal field defect. Often when the sella Turcica was X-rayed it appeared to be normal. There was seldom a clean cut field defect showing hemianopsia. The defect may begin above, below, at the periphery, or at the macula and spread from the macula to the periphery.

Radiography may show an enlargement of the sella Turcica or calcification in the walls of a suprasellar cyst.

In middle aged persons the diagnosis of aneurysm should be kept in mind.

Of the suprasellar tumours a meningioma is easier to remove than any other.

Mr. Harvey Cushing demonstrated slides showing the surgical approach made through an osteo-plastic flap in the fronto-temporal region. The cerebrum and dura are gently retracted, the dura

being incised for a short distance along the lesser wing of the sphenoid. Drawings of tumours in relation to the chiasma were shown.

DR. CHRISTIANSEN (Copenhagen) followed and dealt with points in the clinical history, the diagnosis, and in particular the field defects found in cases of suprasellar tumours.

PROFESSOR LUDO VAN BOGAERT (Brussels) said that the classical chiasma-syndrome may be lacking, and the only ocular symptom may be progressive amaurosis either with or without optic atrophy. Choked disc may precede this amaurosis, or manifest itself as a secondary symptom later.

Compression of the region above the infundibulum may give rise to somnolency, polyuria, derangements in the metabolism of carbohydrates, fat and salt content of the blood; also to circulatory disturbances, changes in the basal metabolism, and finally psychic derangements.

In the discussion that followed J. ROLLET (Lyon) described two clinical forms of complication in suprasellar tumours based on five cases which he had observed. The first, a sensory form with compression of the optic fibres. This is a comparatively benign form. The second, a sensory-motor and vascular form, in which there is no compression of the optic fibres but pressure on other nerves and the outer wall of the cavernous sinus, so that exophthalmos becomes manifest.

Drs. B. Brouwer, K. Hirschmann, J. Igersheimer, and O. Hirsch also took part in the discussion.

At 7.30 *p.m.* in the Kurhall, Scheveningen, a banquet was held.

PROFESSOR DR. VAN DER HOEVE proposed the toasts to the members of the Royal Family of the Netherlands and then made a speech in English, German, and French. This speech reflected the generous character and personal charm of the speaker, whose efficiency, equanimity and congenial manner towards everyone at the Congress none will forget.

MR. HARVEY CUSHING and DR. K. K. K. LUNDSGAARD also made eloquent speeches in appreciation of the hospitality and kindness that Holland had showered upon the members of the Congress.

DR. KENEL expressed his thanks and appreciation in French.

MR. TREACHER COLLINS, the President of Honour of the International Council, proposed the toast of Professor Dr. J. van der Hoeve, with his customary eloquence and wit.

FRIDAY, SEPTEMBER 13, 1929.

At the Theatre Seinpost, Scheveningen, there was held a discussion on the operation of cataract extraction.

DR. W. STOCK (Tübingen) read a paper on " The operation of complicated cataract extraction in the capsule." He recorded the

results of this operation in 52 cases of complicated cataract. The operator made a large linear incision, a broad iridectomy (where no preliminary iridectomy had been performed) and removed the lens by the " Schlitten-manöver," without detaching the synechiae beforehand.

Nine cases had been treated previously by Röntgen-rays, and the result in these cases was satisfactory. 44 patients had their vision considerably improved, and in only two was there a detachment of the retina. The author believes that, in chronic iridocyclitis, an operation for cataract by opening the capsule nearly always results in failure, whereas extraction with the capsule is the only possibility of giving the patient effective vision.

Dr. E. Kalt (Paris) spoke of his experiences with cataract extraction since 1896. He advocated extraction with the capsule and suturing of the cornea to prevent prolapse of the iris.

Dr. B. Strandbygard (Sönderborg) also spoke about corneal suture in cataract extraction, and advised this procedure.

Dr. G. Weill (Strasbourg) discussed the value of the keratome incision in the operation for senile cataract. He demonstrated by diagrams on the screen the various types of keratome he uses with the method he adopts. He enlarges the incision by a sideward movement at the moment the keratome is withdrawn from the anterior chamber.

Dr. A. van Lint (Bruxelles) described the lateral intra-capsular lens-extraction, and said that this method is ideal and without danger.

He makes a conjunctival flap on the temporal side up to the limbus. Sometimes it is necessary to do a preliminary external canthotomy. When the conjunctival flap is completed sutures are put into the cut edges and allowed to hang loose. Then a broad keratome is passed into the anterior chamber at the limbus and withdrawn. This incision is enlarged with scissors. A sucker is passed into the anterior chamber and applied to the anterior lens capsule, and the lens turned over and extracted under suction. The iris is replaced and the conjunctival flap sutured.

Professor A. Elschnig (Prague) read a paper on the present standpoint as to intra-capsular extraction of senile cataract.

He gave the results of the last 246 intra-capsular extractions that he had performed. 39 were combined with iridectomy and 207 extracted without iridectomy. The extraction was successful in 178 cases (72 per cent.); only in 38 cases (15.5 per cent.) the capsule could not be seized or tore when taken hold of.

Among 194 extractions for senile cataract in non-myopic eyes there was only 1.54 per cent. prolapse of the iris, and 3 cases with an upward displacement of the pupil.

Of the 52 myopic eyes, 46 were extracted simply, and 6 by the

combined method. 75 per cent. of the cases were successful. Vitreous humour was lost in 3.4 per cent. Professor Elschnig compared these figures with those published from the Pragueish-German Ophthalmic Clinic (B. G. Spitzer). Extra-capsular extractions were performed in these cases; 6.3 per cent. lost vitreous where the extraction was simple, and 12.2 per cent. where it was combined with iridectomy.

The author said that only one of his cases was lost through infection, while in the cases where the capsule could not be taken hold of, after-cataract with slight iritis occurred sometimes. Professor Elschnig believes that the method of Stanculeanu-Knapp-Török is the best known at present.

E. CUELLAR (Habana) described the value of iridectomy in cataract extraction.

The operative technique and complications of cataract extraction were discussed at great length by many speakers.

At 3.30 *p.m.* The closing session of the Congress took place and at 5 *p.m.* a Reception was given by the Municipality of the Hague at the " Hotel de twee Steden " Buitenhof.

EXHIBITION OF DRAWINGS, BOTTLE SPECIMENS, AND HISTOLOGICAL SLIDES.

In a room on the first floor of the Colonial Institute there were exhibited drawings and paintings of ocular diseases, both external and intraocular, made by Theodore Hamblin's drawing department. Mr. Basil Graves showed some slit-lamp paintings, also made by this firm.

The Harvard Eye and Ear Infirmary showed some slides demonstrating pathological lesions of the eye. There were bottle specimens of congenital abnormalities and monstrosities. P. Nieuwerhuyze (Utrecht) showed some excellent drawings, paintings, photographs, and histological slides of neurofibromatosis. Dr. Wells (Boston) demonstrated the phoro-optometer and stereoscope; C. Berens (New York), the ophthalmic ergograph, and L. D. Green (San Francisco), a precision refracting instrument which is in fact an instrument containing trial lenses which can be suspended in front of the patient and rapidly manipulated by the operator.

EXHIBITION OF OPTICAL APPARATUS

On the ground floor of the Colonial Institute a series of rooms were set apart for an exhibition of optical apparatus, instruments, books, and other objects of interest to ophthalmic surgeons.

Messrs. Clifford Brown, Clement Clarke, Curry and Paxton, Dixey, Theodore Hamblin, Hawes, Keeler, Rayner and Spiller, representing the Association of Dispensing Opticians, Ltd., demonstrated some interesting apparatus.

The Uni-Bifocal and Demi-Luxe Company also displayed their work with bifocal lenses. Busch, Carl Zeiss, Nitsche and Gunther, Klingfuss and Co., Wurach, Walb, Windler, and Fischen displayed optical apparatus and surgical instruments. Messrs. L. Giroux and Luer exhibited French work of this nature.

The Bureau

In the main entrance hall of the Colonial Institute, Amsterdam, there stood a central bureau where each member of the Congress had a pigeon hole for the storage of Congress literature, invitations, and other articles of current interest. There were also a bank, a tourist office, a post office, a cloakroom, and a newspaper stall. The organisation and reception work of this bureau was managed entirely by voluntary workers from a ladies club. One could not speak too highly of their efficiency and the pleasant congenial manner in which they dealt with the multitude and the confusion of languages. Their work was greatly appreciated.

Each member of the Congress received a badge, which consisted of a circular plaque of Delft china, mounted on a red, white, and blue ribbon, and having the appearance of a medal. On a cardboard clasp the member's name and nationality were inscribed.

Painted on the plaque was an owl, a candle, and a pair of spectacles with this inscription:

" Wat baet er kaers of bril,
Als den uil niet sien en wil."

This is from a picture by Jan Steen (1626—1679). It is translated as follows:

" What is the good of candle or spectacles,
When the owl does not want to see."

To interpret the emblem it is needful to state that in Holland the owl is looked upon as the symbol for stupidity as well as of knowledge; the candle represents light and the spectacles need no verbal explanation.

The following interpretations have been suggested:

1. The emblem may be a warning to the eye-surgeon that his art is not omnipotent, that ophthalmology has its limits, for of what use is the best light (candle) and the whole of ophthalmology (the spectacles) if the patient cannot see?
2. If we look on the owl as the symbol of stupidity, it may mean that no results can be had from a stupid recalcitrant patient; for of what use is light (candle) and the whole of ophthalmology (spectacles) if the patient will not see?
3. That a stupid eye-surgeon can have no results; for of what use is the best light (candle) the finest instruments (spectacles) if the surgeon (the owl) cannot see and is too stupid to observe or to interpret what he has observed?
4. The science of ophthalmology (spectacles and owl) may give light (candle) to suffering humanity.

Conclusion

The organization of the Congress, under the able management of Prof. J. van der Hoeve, Dr. L. E. Marx, Prof. W. P. Zeeman, and G. C. Vattier-Kraane was in every way admirable. Much praise is due to them for the splendid work they have done. We shall remember their names with a feeling of gratitude for the time, trouble, and self sacrifice they spent on behalf of the Congress.

Thanks are due to the Committee of Reception and Excursion, particularly Messrs. G. C. Vattier-Kraane (Amsterdam), A. H. Garrer (Haarlem), K. T. A. Halbertsma (Delft), A. W. Frintzen (Leiden), C. H. Hazewinkel (Gravenhage), and J. van den Borg (Rotterdam), who provided excursions, amusements, and many other comforts in a most lavish manner. Their generosity and the work they did was particularly appreciated by the ladies for whom some excursion or tour was organized each day.

There are also many others to whom we feel grateful; their names will be cherished in our associations with Holland.

Professor Dr. J. van der Hoeve will always be remembered as a congenial and generous host, and a very energetic President. The work of Mr. H. M. Roelofz as Treasurer, and Professor Dr. W. P. Zeeman as Secretary is much appreciated. We hope that their reward will be the knowledge that they have helped us to advance along the road that leads toward the discovery of those scientific truths we seek for. Such a congress also aids in cementing and bringing about friendships between nations which may be of lasting value to the peace of the world and to the progress of ophthalmology.

H. B. Stallard.

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